

Bell Work

16-Aug-2013

- What are procedures for cleaning up broken glass?
- List three (3) new ways you learned how to use a search engine
- If you forget to write down homework, where can you find out what it is (2 places)

Objective

Recall from memory the location of the safety equipment in the lab.

Identify and use various pieces of lab equipment

Practice basic laboratory skills

Demo

In your notes draw what you see before we start... be descriptive if you can.

- What is in each test tube

- What are we adding to each test tube

- What happened after things were added?

Syllabus

Get signed and brought back to me by the 21st of August 2013.

- Find the grade scale weights for homework and tests
- What is the policy for absences and make up work/ tests?

Math Assessment

This was just an assessment for me to know where you are in regards to solving word problems and basic algebra.

Closure

How can the internet help you this year in chemistry, three (3) distinct ways?

Bell Work
19-Aug-2013
On A New Bell Work #2
Pre -AP Chem.

Summarize the problem solving methods you read about this weekend.

EQ: When in the kitchen cooking what are transferable skills you are learning now or can bring to class?

Objective:

Recall from memory the location of the safety equipment in the lab.

Identify and use various pieces of lab equipment

Practice basic laboratory skills

Quick Review

Draw a map of the lab and identify the locations of the following...

Eye wash station

Safety shower

Fire blanket

Emergency electrical shut off switches

All exits

Fire extinguisher

http://www.youtube.com/watch?v=kIztD6u1f-w&feature=c4-overview&list=UU4zUmZEodXrIc4_sz2nASLg

Accidents and Injuries

Report **ALL** accidents and injuries to your teacher immediately!!!

Be aware of safety hazards associated with each chemical you use.



Accidents and Injuries

Eye accident – Wash the eye with copious amounts of water for at least 15 min.

Fire Burns – Stop, Drop, and be covered w/ a fire blanket or soaked w/ water. Do not remove clothing stuck to victim. Get medical attention immediately.



Waste Disposal

**First ask your teacher
where/how to dispose of
waste.**

Never pour anything down
the drain unless you are
told to do so.

**A 5 gallon waste jug or a
large beaker will be
supplied for substance that
cannot go down the drain**



Reasons for proper waste disposal

- ◆ **Hazardous chemicals down the drain can lead to pollution of ground water, lakes, rivers, etc.**
- ◆ **Plants and animals will die if they are exposed to hazardous chemical waste.**
- ◆ **Serious health problems will become present in people if hazardous waste finds its way into drinking water.**

Lab Equipment



**Learn it! You will be using all of it
and might be quizzed on it**

Beaker

Beakers hold solids or liquids that will not release gases when reacted or are unlikely to splatter if stirred or heated.



Erlenmeyer Flask

Erlenmeyer flasks hold solids or liquids that may release gases during a reaction or that are likely to splatter if stirred or heated.



Volumetric Flask

Use to measure near perfect volumes,
your most accurate
piece of glass ware.



Graduated Cylinder

A graduated cylinder is used to measure volumes of liquids.



Test Tubes and Test Tube Rack



Test tube racks are for holding and organizing test tubes on the laboratory counter. Plastic racks may melt in contact with very hot test tubes.

Test Tube Brushes

Test tube brushes are used to clean test tubes and graduated cylinders.

Forcing a large brush into a small test tube will often break the tube.



Test Tube Holder

A test tube holder is useful for holding a test tube which is too hot to handle.



Rubber Stoppers

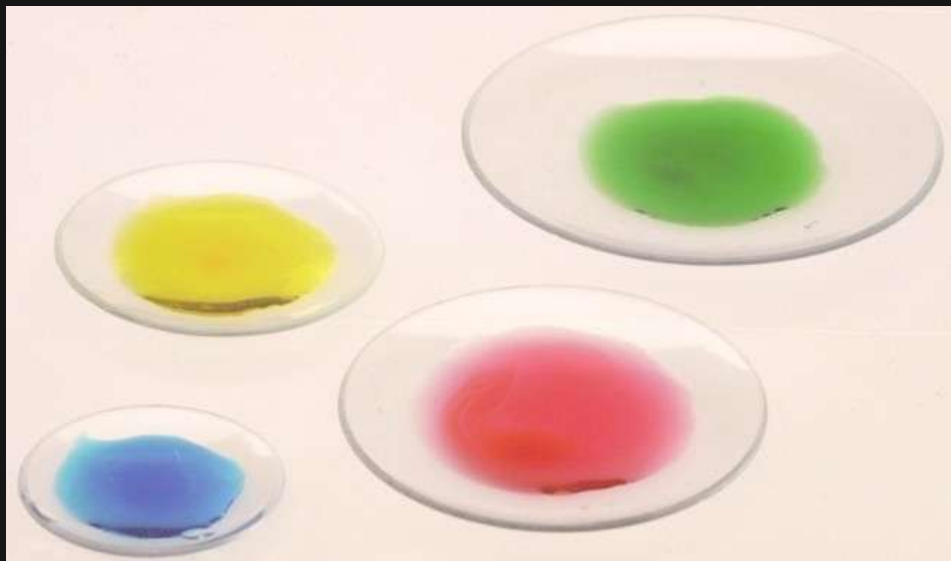


Rubber stoppers are used to close containers to avoid spillage or contamination.

Containers should never be heated when there is a stopper in place.

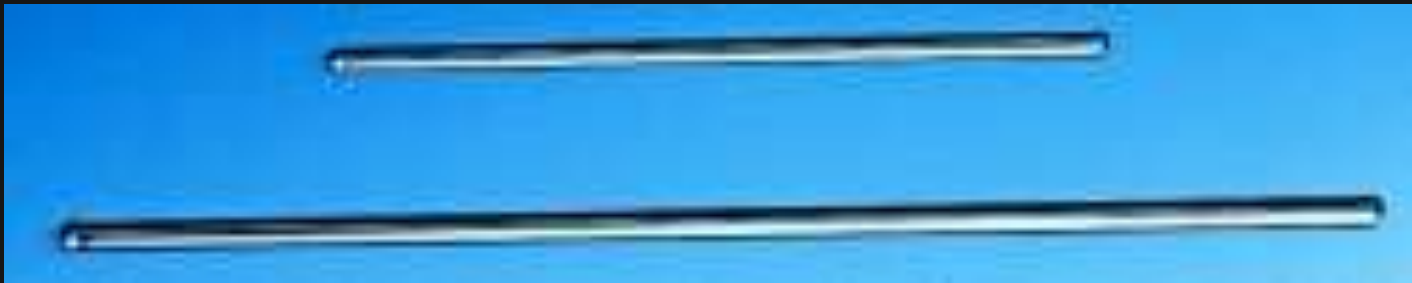
Watch Glass

A watch glass is used to hold a small amount of solid, such as the product of a reaction.



Glass Stir Rod

A glass rod is used to manually stir solutions. It can also be used to transfer a single drop of a solution.



Medicine Dropper

A medicine dropper is used to transfer a small volume of liquid (less than one mL).



Litmus Paper

- ◆ Neutral litmus paper acid or base indicator



Forceps

Forceps (or tweezers) are used to pick up small objects.



Scoopula and Spatulas

Scoopula used for scooping powdered chemicals for dispensing



Spatulas are used to dispense solid chemicals from their containers.

Chemicals should never be transferred with your bare hands.

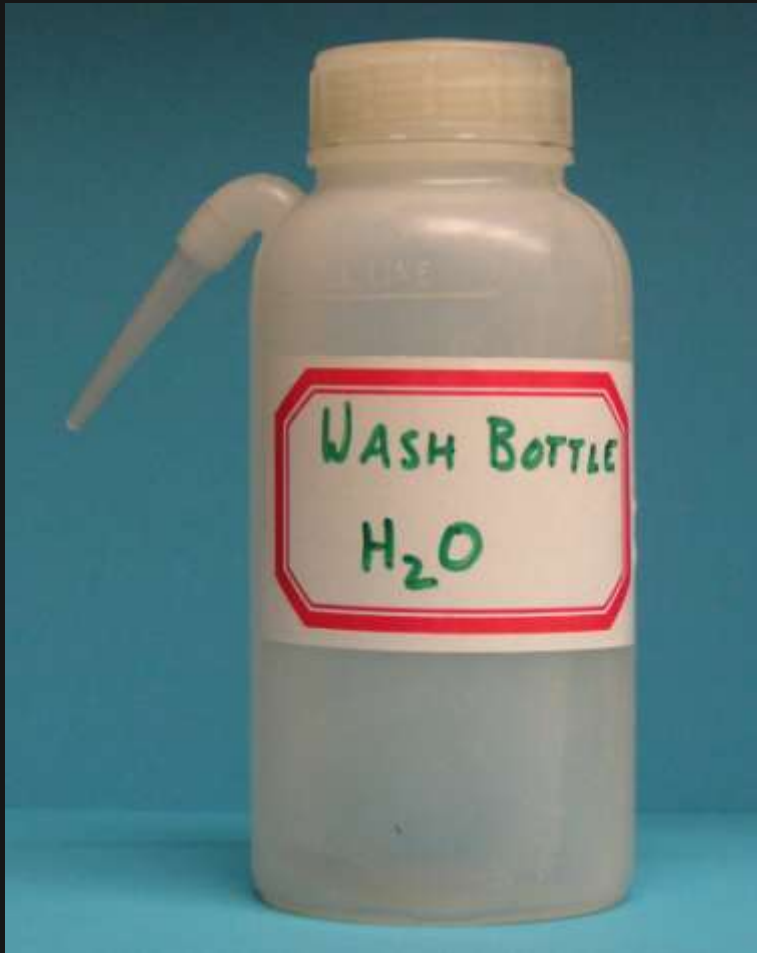


Funnel

A funnel is used to aid in the transfer of liquid from one vessel to another.



Wash Bottle



- ◆ **A wash bottle has a spout that delivers a wash solution to a specific area. Distilled water is the only liquid that should be used in a wash bottle.**

Beaker Tongs

**Beaker tongs
are used to
move beakers
containing hot
liquids**



Bunsen Burner and Striker

Bunsen burners are used for the heating of nonvolatile liquids and solids.

Strikers are used to light Bunsen burners.

The flints on strikers are expensive. Do not operate the striker repeatedly just to see the sparks!



Wood Splints

**Used to safely conduct
flame tests and
among many other
uses**



Evaporating Dish

The evaporating dish is used for the heating of stable solid compounds and elements.



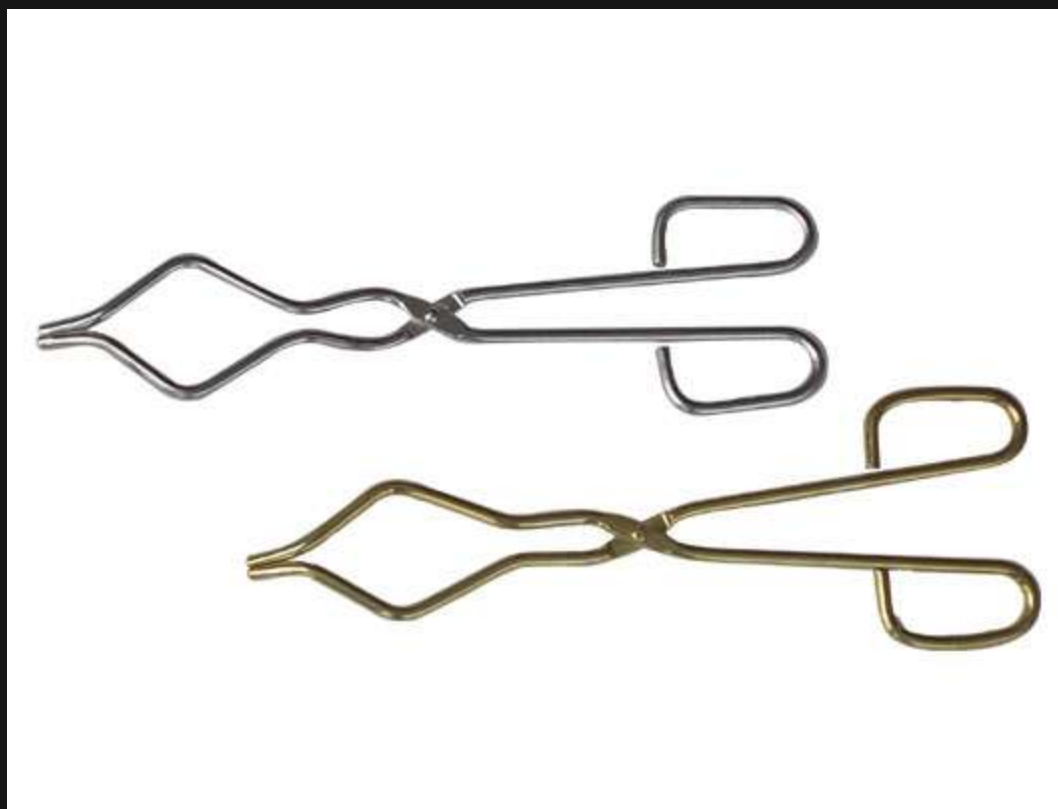
Crucible



Crucibles are used for heating certain solids, particularly metals, to very high temperatures.

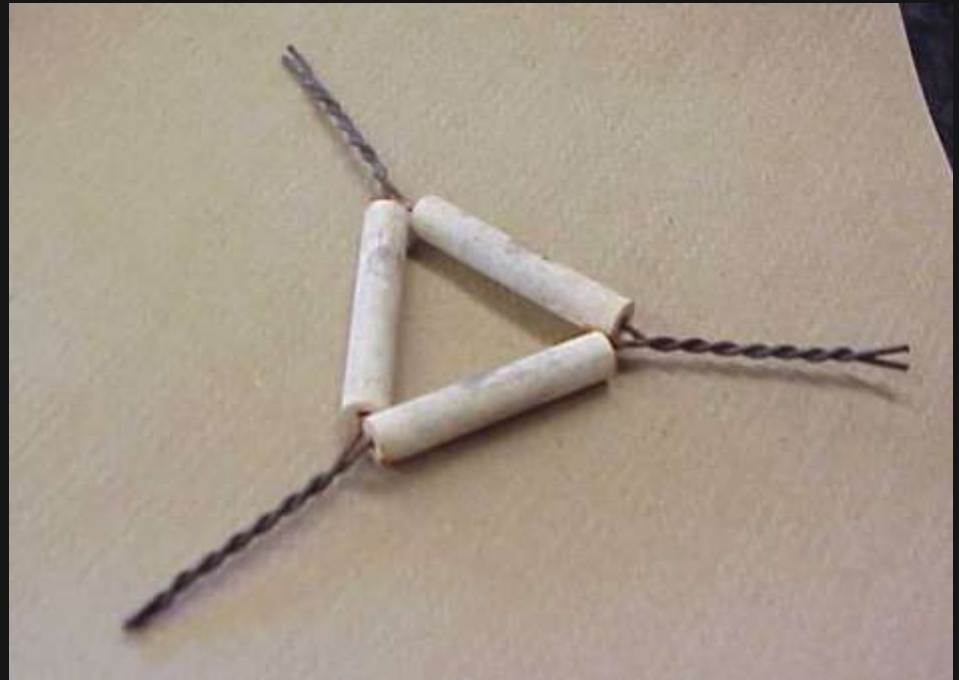
Crucible Tongs

For handling hot crucibles; also used to pick up other hot objects. NOT to be used for picking up beakers!



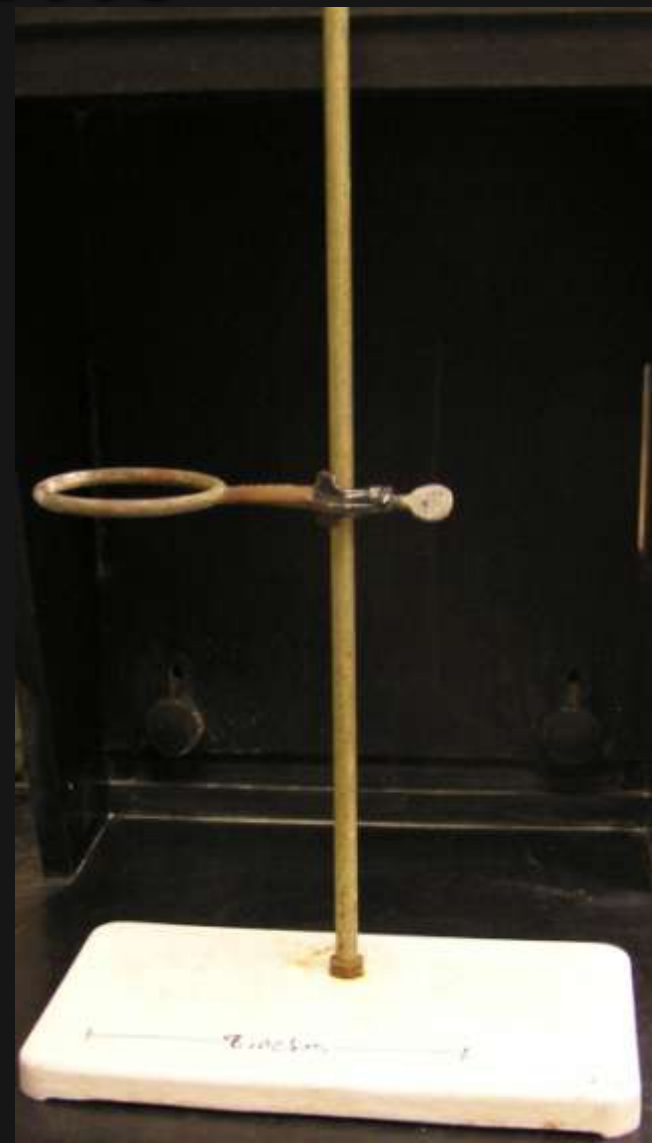
Clay Triangle

The clay triangle is used as a support for porcelain crucibles when being heated over a Bunsen burner.



Ringstands and their Components

Ringstands are a safe and convenient way to perform reactions that require heating using a Bunsen burner.



Ringstands and their Components

Iron Rings

Iron rings connect to a ringstand and provide a stable, elevated platform for the reaction.



Ringstands and their Components

Utility Clamps

Utility clamps are used to secure test tubes, distillation columns, and burets to the ringstand.



Ringstands and their Components

Double Buret Clamps

**Double Buret
clamps are
used to burets
– long
graduated
tubes used in
titration.**



Ringstands and their Components

Wire Gauze



Wire gauze sits on the iron ring to provide a place to stand a beaker.

On older wire gauze, the white material is asbestos!

Quick Review 😊

On a scratch piece of paper draw an Erlenmeyer flask, a crucible, beaker tongs, and a scoopula. Give it to your neighbor and have them check if it is correct. If you were mistaken they will draw the correct depiction of the item

Closure

- A.** What should always be on your face while in the lab?
- B.** I just broke a piece of glass-wear, what should I do?
- C.** Where should I put waste chemicals?
- D.** Where are the eye wash station, safety shower, and fire blanket?